

Memorandum

Date: January 25, 2016

To: Timothy Stapleton
Luis Perez

From: Dean Dusette

Subject: Inglewood Oil Field - Fugitive Dust Compliance

Background

Fugitive dust was introduced for discussion by Mr. Gless at the December 10, 2015 CAP meeting. Mr. Gless noted that during a recent high wind event he was unable to spot any water trucks working on the Inglewood Oil Field or any water trucks following vehicles he observed creating dust. Mr. Gless called the SCAQMD but did not call the FM O&G 1-800 complaint number. Mr. Gless requested more water trucks and or less field activity during high wind events. Ms. Paillet noted that FM O&G has at least one water truck, typically two, working on the field on any given day and that due to the large size of the field water truck operations are not always visible from view-points outside the oil field.

In an email dated December 11, 2015, John Kuechle, CAP Chair, inquired about FM O&G's obligation to control of fugitive dust as outlined in their Fugitive Dust Control Plan (Plan) by providing two main comments:

- Section 3.0 of the Plan states *"Implement watering with a water truck at least once daily and more frequently as conditions require, for traveled industrial unpaved roads to achieve visibly moist condition to prevent fugitive dust emissions from vehicular traffic and maintain a stabilized surface"*. Mr. Kuechle commented that this indicates that there is no 2 truck limit on water trucks and that if more are necessary, that FM O&G should provide additional water trucks.
- Based on the above Plan language, Mr. Kuechle also asserts that the Plan requires the "prevention" of dust as opposed to reducing or limiting dust, therefore, if dust is seen behind oil field vehicles FM O&G has violated the Plan and therefore the CSD.

The ECC met with FM O&G staff on December 22, 2015 during a field visit on-site inspection and discussed fugitive dust and the Plan.

Dust Complaints

Review of the complaint logs from the implementation of the CSD to present indicates six dust complaints as summarized in the table below.

Date	Location
10/27/09	Stocker Street (Winds > 30 mph)
10/27/09	Windsor Hills (Winds > 30 mph)
7/23/12	Ladera Crest
8/27/14	Stocker and Fairfax Intersection
3/16/15	Windsor Hills
11/16/15	From oil field (Winds > 30 mph)

As the table shows, three of the six dust complaints occurred during high wind events.

Plan Review

The fugitive dust control measures in the Fugitive Dust Control Plan specific to vehicular traffic are listed below along with brief notes on current compliance. Note that most of the dust control measures in the Plan target construction, grading, and hauling activities and that there have been no significant activities of this type at the oil field recently.

- *Limit on-site vehicle speeds (on unpaved roads) to 15 mph, indicated by posting of speed signs and training.*
 - Compliance - The vehicle speed limit for the entire field, paved or unpaved, is 15 mph with signage in the field annotating such. Staff have been trained to obey the 15 mph limit. The ECC has observed FM O&G discuss the speed limit with staff and contractors during field inspections and the ECC has not witnessed any apparent violations of the speed limit while visiting the site.
- *Implement watering with a water truck at least once daily and more frequently as conditions require, for traveled industrial unpaved roads to achieve visibly moist condition to prevent fugitive dust emissions from vehicular traffic and maintain a stabilized surface.*
 - Compliance - FM O&G utilizes a water truck, normally two water trucks, during daily operations for control of dust. The water trucks water the main field roads and obtain water from the storm water basins to use recycled water as available. During the subject discussion on December 22, 2015, FM O&G agreed to prioritize future water truck activity to the roads where the majority of vehicle traffic is occurring during future high wind events. Currently, FM O&G does not have documentation to support the number of watering events for any given road per day in the oil field nor if certain roads are watered more than once per day during high wind events.
- *Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots to prevent visible fugitive dust emissions. Stabilize soils of unpaved roads and parking lots to minimize dust emissions with water or dust suppressants as needed.*
 - Compliance - There are no significant construction or grading projects currently at the oil field. The main temporary storage area for soil is located just inside the main gate off of Stocker and this main road does receive daily water truck coverage. Parking in the oil field has utilized the same parking lot areas as has been the practice in past years.
- *Install and maintain a pipe-grid track out control device or a gravel bed track out apron (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) to reduce mud/dirt track out from extending more than 25 feet from each unpaved vehicle egress/exit routes.*
 - Compliance - There are pipe-grid track out control devices at the main road gate at Stocker and the main field gate onto Fairfax. In addition, the use of dedicated staff with high pressure water hoses to rinse the under-carriage of vehicles prior to leaving the field onto Stocker was observed by the ECC during last year's storm season. Vehicles were rinsed prior to driving over the pipe-grid track out control device.

SCQAMD Rule 403 - Fugitive Dust

The FM O&G Plan is based on compliance with, and the mitigation measures in, SCAQMD Rule 403 - Fugitive Dust. Section 403 (g) of the Rule provides for exemptions to the provisions of the Rule with Section 403 (g)(2)(A) specific to high wind events as follows:

- *403 (g)(2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:*
(A) When wind gusts exceed 25 miles per hour, provided that:

- (i) *The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and:*
- (ii) *record are maintained in accordance with subparagraph (e)(1)(c).*

The referenced requirement (d)(1) as follows:

- *403 (d)(1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed area surface such that:*
 - (A) *the dust remains visible in the atmosphere beyond the property line of the emission source; or*
 - (B) *the dust exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.*

Note that referenced requirement (d)(3) is related to particulate matter concentrations as monitored by simultaneous PM₁₀ samplers which is not applicable to the oil field.

The record maintenance requirements in subparagraph (e)(1)(c):

- *403 (e)(1)(C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request.*

The required contingency measures for unpaved roads in Table 3 of Rule 403 are as follows:

- (1C) Apply chemical stabilizers prior to wind event; OR
- (2C) Apply water twice per hour during active operation;
- OR
- (3C) Stop all vehicular traffic.

Conclusions/Recommendations

FM O&G feels that their operations qualify for the high wind exemption in SCAQMD Rule 403 based on the fact that they use water trucks at the oil field. However, the contingency measures contained in Table 3 of Rule 403 require the application of water twice per hour during active operation. Currently, FM O&G does not oversee the water truck operations directly, and cannot ratify whether the application is done twice per hour; the sub-contractor providing the service applies water based on their expertise. Therefore, FM O&G does not have the documentation to qualify for the exemption. Discussions with FM O&G staff on December 22, 2015 resulted in FM O&G agreeing to make an effort to document water truck activity and focus water truck activity to main roads during high wind events, however, it is not clear whether this will meet the twice per hour Rule 403 Table 3 requirement.

Independent of whether FM O&G can qualify for the exemption to SCAQMD Rule 403 noted above, FM O&G is meeting the requirements of the CSD for fugitive emissions from vehicle traffic with one potential exception. As noted above, the Plan requires "*Implement watering with a water truck at least once daily and **more frequently as conditions require***". While it is clear that FM O&G uses water trucks for the control of dust and could likely provide invoices to document their use at the oil field on any given day, there is no documentation supporting watering of any particular location or if any particular location is watered more than once during high wind events.

It should be noted that the Plan does not require water trucks to drive in front of vehicles as they drive through the oil field as brought up by Mr. Gless at the December 2015 CAP meeting. Regarding the number of water trucks comment by Mr. Kuechle in his December 11, 2015 email, the Plan requires the use of a water truck and that the water truck be used more frequently than daily as conditions require.

Therefore, the addition of more water trucks is not a requirement of the Plan or the CSD. That said, and as noted above, the ECC recommends that FM O&G coordinate and document the water truck activities during high wind events.

Future Compliance Activities

The Environmental Compliance Coordinator (ECC) will schedule future site inspections on forecasted high wind event days to document both water truck activities and witness/photograph fugitive dust. The ECC will meet with FM O&G staff to discuss the requirements necessary for the high wind exemption in SCAQMD Rule 403.